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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/453,509	12/03/1999	ANTHONY BEVERINA	8594-001-64	2741
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PIPER RUDNICK LLP 1200 Nineteenth Street, N.W.			ART UNIT	PAPER NUMBER
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DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		09/453,509	BEVERINA ET AL.			
		Examiner	Art Unit			
		Samuel Broda	2123			
Period fo	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
THE - External after of the control	ORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a representation of the period for reply is specified above, the maximum statutory perior to reply within the set or extended period for reply will, by state reply received by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply be to eply within the statutory minimum of thirty (30) do will apply and will expire SIX (6) MONTHS frought, cause the application to become ABANDON	timely filed ays will be considered timely. In the mailing date of this communication. IED (35 U.S.C. § 133).			
Status						
1)⊠ Responsive to communication(s) filed on 20 October 2004.						
2a)⊠	This action is FINAL . 2b) The state of the	nis action is non-final.				
3)□	<u> </u>					
•—	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
4)⊠	☑ Claim(s) <u>1-12 and 42-49</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)[Claim(s) is/are allowed.					
6)⊠	Claim(s) <u>1-12,42,45,48 and 49</u> is/are rejected.					
7)🛛	Claim(s) <u>43,44,46 and 47</u> is/are objected to.					
8)	Claim(s) are subject to restriction and	I/or election requirement.				
Applicat	ion Papers					
9) The specification is objected to by the Examiner.						
-	0)⊠ The drawing(s) filed on <u>01 November 2001</u> is/are: a)□ accepted or b)□ objected to by the Examiner.					
,—	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority (under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). 						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
	ce of References Cited (PTO-892) the of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summai Paper No(s)/Mail I				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) Characteristic Drawing Review (PTO-946) 5) Notice of Informal Patent Application (PTO-152) Characteristic Drawing Review (PTO-946)						

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DETAILED ACTION

1. This communication is in response to Applicants' <u>Amendment</u> received 20 October 2004. Claims 1 and 7 were amended; claims 42-49 were added. Claims 1-12 and 42-49 are pending.

Claim Rejections - 35 U.S.C. § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2.1 Claims 1-2, 4, 7-8, 10, 42, 45, and 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over:
- (a) Anonymous, "SAVI: Systematic Analysis of Vulnerability to Intrusion," Volume 1, SAND89-0926, Sandia National Laboratories, December 1989 (publication available from www.ntis.gov)("Sandia")(prior art previously submitted to Applicants), in view of:
- (b) Anonymous, "General Airport Assessment Plan," Science Applications International Corporation, Contract Number: DTFA03-97-C-00036 (November 1997)("SAIC")(reference purchased by the Federal Aviation Administration through a public procurement process described below in Section 2.16).

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2.2 Regarding claims 1 and 7, Sandia teaches the "Systematic Analysis of Vulnerability to Intrusion" ("SAVI") software that operates on PCs running DOS. The SAVI software permits a user to model the following characteristics: (1) target; (2) threat; (3) facility; and (4) protection systems, in order to calculate a set of probability of interruption estimates corresponding to "the probability that the response force will interrupt the adversaries prior to completion of their mission." See Sandia, pages A-1 through A-4. This probability of interruption is estimated with respect to target, threat, facility, and protection system corresponding to Applicants' amended limitation of "determining a probability that a terrorist attack using the weapon and at the delivery point will occur" as appears in claims 1 and 7.

A personal computer running SAVI would include a memory, input device, and processor.

Sandia further teaches that the calculation of the probability of non-detection (corresponding to a likelihood of a successful delivery or a probability that a terrorist successfully reaches the target) can be made using the SAVI software based on the worst-case estimates for the individual elements in the model. See pages A-20 through A-21.

The SAVI software models threat vectors corresponding to terrorists possessing equipment and explosives, and attacking while: (1) on foot; (2) in a land vehicle; and (3) in an aircraft or helicopter. See page A-19. For each site model, the SAVI software ranks and lists the most vulnerable path scenarios. See page A-26. Corresponding to the limitations appearing in Applicants' claims 1 and 7, the SAVI software determines an accessibility of a site by

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determining a threat vector which is a most likely threat vector by which the weapon will be delivered to the delivery point and the likelihood of a successful delivery based on the model. The SAVI software also provides suggestions for reducing path vulnerability when the software determines that no critical detection point exists on the path and that the probability of interruption equals zero. See pages A-26 through A-29.

However, the SAVI software does not appear to explicitly determine the probability that a terrorist attack will occur, and does not appear to explicitly calculate a risk based at least partially on the accessibility and probability.

SAIC teaches an airport vulnerability assessment methodology that models a relative risk for each threat-target combination. See SAIC, pages 8-9 Section "4.1 Overview." According to SAIC:

... The methodology is applied in a logical, stepped fashion that considers the threat, target identification, aggressor types, malevolent acts of concern, and consequences of a successful malevolent act. Algorithms are used that analyze potential consequences, relative importance of targets to the aggressor, and security vulnerability levels to arrive at a relative risk for each threat and target combination. Countermeasures are then developed to minimize the risk and the methodology is re-applied to determine the risk reduction achieved.

Specifically, SAIC teaches the modeling of a real risk as the product of a target importance ("TI") that includes a consequence value, and a product of two probabilities "(1-LA) (1-LS)" corresponding to the probability that a terrorist attack will occur. See page 11 Section

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"4.6 Relative Risk." Therefore, SAIC teaches the calculation of a risk based on at least partially on the accessibility and probability that a terrorist act will occur. The risk determination is made with respect to "threat, target identification, aggressor types, malevolent acts of concern, and consequences of a successful malevolent act," corresponding to Applicants' amended limitation "determining a probability that a terrorist attack using the weapon and at the delivery point will occur" as appears in claims 1 and 7.

According to SAIC, the factor (l-LS) "is proportional to the likelihood that an aggressor will be successful, given an attempt has been made." Page 12 paragraph 1. This factor corresponds to one minus the probability of interruption as calculated by the SAVI software.

- 2.3 Regarding claims 1 and 7, it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to incorporate the path vulnerability analysis of the SAVI software into the relative risk calculations taught by SAIC, because the resulting combination would provide more accurate risk calculations and aid in the development of countermeasures to reduce the risk of terrorist attack.
- 2.4 Regarding claims 2 and 8, SAIC teaches calculation of risks using consequence calculations. See pages 10-11 Section "4.3 Consequences."
- 2.5 Regarding claims 4 and 10, SAIC teaches preparation of reports indicating probability, accessibility, and relative risk. See pages C-9 and C-12.

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2.6 Regarding claims 42 and 45, Sandia teaches the calculation of the probability of interruption is dependent on the "Response Force Time (RFT)" (see page A-23) and according to Sandia at page A-16 last paragraph through page A-17, the RFT should:

... be based on time to deploy a sufficient number of response persons to stop the forward progress of the adversary long enough to allow for reinforcements to arrive. This initial number will vary depending on many factors, such as the **number of adversaries** and the amount of exposure of the on-site forces.

(Emphasis added.)

As the RFT is based on factors such as the number of adversaries, which is a factor independent of the site, the probabilities calculated by the SAVI software are based on at least one factor independent of the site.

- 2.7 Regarding independent claims 48 and 49, these claims are rejected using the reasoning of the rejection of claims 42 and 45 above.
- 2.8 Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandia, in view of SAIC, and further in view of Swiatek et al, "SAIC Science and Technology Trends II: Crisis Prediction Disaster Management", pp. 1-13 (June 1999)(paper available at: http://www.saic.com/products/simulation/cats/VUPQPV4R.pdf)
 (prior art previously supplied to Applicants).
- 2.9 Regarding claims 3 and 9, the combination of Sandia and SAIC teaches calculation of risks using consequence calculations. However, the combination of Sandia and

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SAIC does not appear to explicitly teach the calculating consequences using a consequence calculator plug-in.

Swiatek et al teaches the "Consequences Assessment Tool Set" ("CATS") software that operates on Pentium PCs running Windows and incorporates a "suite of hazard, casualty, and damage estimation modules to estimate and analyze effects due to natural phenomena, such as hurricanes and earthquakes, and technological disasters, such as terrorist incidents, involving weapons of mass destruction, and industrial accidents." Abstract, page 1 paragraph 1.

The CATS system also includes a "Technological Hazards" software portion that simulates effects due to nuclear, biological, and chemical weapons releases and includes risk calculations based on accessibility and probability. See page 7 column 1 "Technological Hazards". This software portion is separated into plug-in modules; according to Swiatek et al at page 7 column 1:

- ...While various codes exist that can perform the calculations, the main difficulty with existing NBC hazard products is the lack of a common architecture for the creation of input and output files and the ability to perform analysis for results of multiple models within a common frame of reference. CATS has solved these problems through the formation of a graphic user interface (GUI) that directly links to the NBC modules utilized, enabling ease of use and analysis in a common geographical information system.
- 2.10 Regarding claims 3 and 9, it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to incorporate the plug-in features of the NBC models used in the CATS software into the combination of the SAVI software and the assessment

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methodology of SAIC, because the resulting software would permit easier analysis using multiple consequence models.

- 2.11 Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandia, in view of SAIC, and further in view of:
- (a) Baker et al, "Access Features Bomb Blast", March 1998 (web page available at: http://www.ncsa.uiuc.edu/News/Access/Stories/BombBlast/indexBB.html)(the "Intro Web Page")(prior art previously supplied to Applicants), and
- (b) Baker et al, "Visualization of Damaged Structures", March 1998 (web page available at: http://archive.ncsa.uiuc.edu/Vis/Publications/damage.html)(the "Publication")(prior art previously supplied to Applicants).

In the rejections below, the Intro Web Page supplies the added limitation found in the claims and the Publication supplies the necessary motivation to combine the Intro Web Page with the other references are used in the rejections.

Regarding claims 5 and 11, the combination of Sandia and SAIC does not appear to explicitly teach the display of a three dimensional representation of the most likely threat vector. The Intro Web Page at page 1 teaches the visualization of structures damaged by terrorist bomb blasts.

According to the Publication at page 3, "the researchers were particularly interested in seeing the progress of the blast's shock front as it hit and went over the top of the building."

Because bomb damage can be asymmetric, the researchers also used the three dimensional

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aspects of the simulation to position the observation point at various views and examine the propagation of the shock front and the subsequent building response.

- 2.12 Regarding claims 5 and 11, it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to incorporate the three dimensional blast viewing features of the system of the Intro Web Page with the features of the SAVI software system, and the assessment methodology of SAIC, because such a system would permit the user to better visualize the potential consequences of threat vectors corresponding to explosives placed in buildings.
- 2.13 Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandia, and SAIC, and further in view of Castillo et al, "Modeling Probabilistic Networks of Discrete and Continuous Variables", Journal of Multivariate Analysis, Vol. 64 Issue 1, pp. 48-65 (January 1998)(prior art previously supplied to Applicants).

Regarding claims 6 and 12, the combination of Sandia and SAIC does not appear to explicitly teach the use of risk calculations using Bayesian networks. Castillo et al teaches the use of Bayesian networks to model networks of discrete and continuous variables.

According to Castillo et al, use of Bayesian networks with a set of conditional distributions is preferable to specifying a joint probability distribution when the number of nodes is large. See page 49 paragraph 2. Castillo et al illustrates use of a Bayesian network to model the damage assessment of reinforced concrete structures. See pages 50-57. Use of a Bayesian

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network permits estimation of the uncertainty propagating through the network (see pages 59-62) and permits sensitivity analysis through parameter modification (see pages 63-64).

- 2.14 Regarding claims 6 and 12, it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to incorporate the Bayesian network modelling techniques of Castillo et al with the features of the SAVI software system, and the assessment methodology of SAIC, because such a system would permit uncertainty propagation estimation and sensitivity analysis.
- 2.15 Claims 1, 4, 7, 10, 42, 45, and 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over:
 - (a) Anonymous, "SAVI: Systematic Analysis of Vulnerability to Intrusion," in view of:
- (b) Lazarick, "Airport Vulnerability Assessment An Analytical Approach," IEEE 32nd
 Annual International Carnahan Conference on Security Technology, pp. 40-46 (October 1998).
- 2.16 Regarding claims 1 and 7, Sandia teaches the "Systematic Analysis of Vulnerability to Intrusion" ("SAVI") software that operates on PCs running DOS. The SAVI software permits a user to model the following characteristics: (1) target; (2) threat; (3) facility; and (4) protection systems, in order to calculate a set of probability of interruption estimates corresponding to "the probability that the response force will interrupt the adversaries prior to completion of their mission." See Sandia, pages A-1 through A-4. This probability of interruption is estimated with respect to target, threat, facility, and protection system

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corresponding to Applicants' amended limitation of "determining a probability that a terrorist attack using the weapon and at the delivery point will occur" as appears in claims 1 and 7.

A personal computer running SAVI would include a memory, input device, and processor.

Sandia further teaches that the calculation of the probability of non-detection (corresponding to a likelihood of a successful delivery or a probability that a terrorist successfully reaches the target) can be made using the SAVI software based on the worst-case estimates for the individual elements in the model. See pages A-20 through A-21.

The SAVI software models threat vectors corresponding to terrorists possessing equipment and explosives, and attacking while: (1) on foot; (2) in a land vehicle; and (3) in an aircraft or helicopter. See page A-19. For each site model, the SAVI software ranks and lists the most vulnerable path scenarios. See page A-26. Corresponding to the limitations appearing in Applicants' claims 1 and 7, the SAVI software determines an accessibility of a site by determining a threat vector which is a most likely threat vector by which the weapon will be delivered to the delivery point and the likelihood of a successful delivery based on the model. The SAVI software also provides suggestions for reducing path vulnerability when the software determines that no critical detection point exists on the path and that the probability of interruption equals zero. See pages A-26 through A-29.

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However, the SAVI software does not appear to explicitly determine the probability that a terrorist attack will occur, and does not appear to explicitly calculate a risk based at least partially on the accessibility and probability.

Lazarick teaches a set of airport vulnerability assessment methodologies that includes modeling a relative risk. These assessment methodologies were developed by contractors and tested at 15 airports, organized through a competitive procurement process through the Federal Aviation Administration ("FAA"), with six contractors eventually involved in a bidder's conference. See pages 41-42.

Specifically, Lazarick teaches the modeling of a real risk as a function of a vulnerability assessment, an asset valuation, and a likelihood of threat attempt corresponding to the probability of terrorist attack. The resulting risk analysis is used to formulate and implement countermeasures. See Fig. 1. According to Lazarick at page 40 "Abstract," such a methodology, part of the "Airport Vulnerability Assessment Project," "... uses automation, analytical methods and tools to evaluate vulnerability and risk, and to analyze cost/benefits in a more quantitative manner."

2.17 Regarding claims 1 and 7, it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to incorporate the path vulnerability analysis of the SAVI software into the risk calculations taught by Lazarick that calculate a relative risk based at least partially on the accessibility and probability, because the resulting combination would provide a more quantitative manner to perform cost/benefit analysis.

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2.18 Regarding claims 4 and 10, reports generated by the contractors for the FAA inherently contain data corresponding to probability, accessibility, and relative risk.

2.19 Regarding claims 42 and 45, Sandia teaches the calculation of the probability of interruption is dependent on the "Response Force Time (RFT)" (see page A-23) and according to Sandia at page A-16 last paragraph through page A-17, the RFT should:

... be based on time to deploy a sufficient number of response persons to stop the forward progress of the adversary long enough to allow for reinforcements to arrive. This initial number will vary depending on many factors, such as the **number of adversaries** and the amount of exposure of the on-site forces.

(Emphasis added.)

As the RFT is based on factors such as the number of adversaries, which is a factor independent of the site, the probabilities calculated by the SAVI software are based on at least one factor independent of the site.

- 2.20 Regarding independent claims 48 and 49, these claims are rejected using the reasoning of the rejection of claims 42 and 45 above.
- 2.21 Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandia, in view of Lazarick, and further in view of:
 - (a) Baker et al, "Access Features Bomb Blast" (the "Intro Web Page"), and
 - (b) Baker et al, "Visualization of Damaged Structures" (the "Publication").

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In the rejections below, the Intro Web Page supplies the added limitation found in the claims and the Publication supplies the necessary motivation to combine the Intro Web Page with the other references are used in the rejections.

Regarding claims 5 and 11, the combination of Sandia and Lazarick does not appear to explicitly teach the display of a three dimensional representation of the most likely threat vector. The Intro Web Page at page 1 teaches the visualization of structures damaged by terrorist bomb blasts.

According to the Publication at page 3, "the researchers were particularly interested in seeing the progress of the blast's shock front as it hit and went over the top of the building."

Because bomb damage can be asymmetric, the researchers also used the three dimensional aspects of the simulation to position the observation point at various views and examine the propagation of the shock front and the subsequent building response.

2.22 Regarding claims 5 and 11; it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to incorporate the three dimensional blast viewing features of the system of the Intro Web Page with the features of the SAVI software system, and the assessment methodology of Lazarick, because such a system would permit the user to better visualize the potential consequences of threat vectors corresponding to explosives placed in buildings.

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2.23 Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandia, and Lazarick, and further in view of Castillo et al, "Modeling Probabilistic Networks of Discrete and Continuous Variables."

Regarding claims 6 and 12, the combination of Sandia and Lazarick does not appear to explicitly teach the use of risk calculations using Bayesian networks. Castillo et al teaches the use of Bayesian networks to model networks of discrete and continuous variables.

According to Castillo et al, use of Bayesian networks with a set of conditional distributions is preferable to specifying a joint probability distribution when the number of nodes is large. See page 49 paragraph 2. Castillo et al illustrates use of a Bayesian network to model the damage assessment of reinforced concrete structures. See pages 50-57. Use of a Bayesian network permits estimation of the uncertainty propagating through the network (see pages 59-62) and permits sensitivity analysis through parameter modification (see pages 63-64).

2.24 Regarding claims 6 and 12, it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to incorporate the Bayesian network modelling techniques of Castillo et al with the features of the SAVI software system, and the assessment methodology of Lazarick, because such a system would permit uncertainty propagation estimation and sensitivity analysis.

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Allowable Subject Matter

3. Claims 43-44 and 46-47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants' Arguments

- 4.1 Applicants first argue at pages 6-7 of the <u>Amendment</u> that the rejections made using the "SAIC" reference are inapplicable because under the MPEP and relevant case law, the SAIC reference does not qualify as a prior art reference. In particular, Applicants argue that:
 - a. distribution of a document to a single person is not dissemination sufficient to qualify the document as prior art (citing *Preemption Devices, Inc. v. Minnesota Mining & Manufacturing*, 221 USPQ 841,843 (Fed. Cir. 1984)("*Preemption Devices*")); and
 - the SAIC reference is analogous to the student thesis at issue in *In re Bayer*, 196, USPQ
 670 (CCPA 1978), in that the probability of public knowledge of the SAIC reference was virtually nil.
- 4.2 Applicants also argue at page 8 of the <u>Amendment</u> that the amendments to the claims plus the newly added claims contain limitations neither taught nor suggested by Lazarick.

Examiner's Reply

5. The Examiner respectfully disagrees for the following reasons:

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5.1 The factual situation presented here is distinguishable from the facts presented in both *Preemption Devices* and *In re Bayer*, and most closely resembles the facts presented in *E.I.* du Pont de Nemours & Co. v. Cetus Corp., 19 USPQ2d 1174 (DC N.Cal. 1990) ("du Pont").

In *du Pont*, the federal district court for the district of Northern California held that a Grant Proposal submitted to the National Science Foundation was a "printed publication" under Section 102, because it was available upon request under the Freedom of Information Act.

According to the court at 1185:

... the appropriate inquiry in this case is not whether a [researcher] would have come across the [grant proposal] or references to it in the course of her work, but rather whether the [proposal] was "sufficiently accessible" to a researcher who exercised "reasonable diligence." Thus, the emphasis is on systematic indexing and availability upon request.

(Italics in original.)

In the present factual situation, Mr. Rick Lazarick publicly solicited a request for proposal regarding airport vulnerability assessments on behalf of the Federal Aviation Administration. Both private contractors and public airports were enlisted in this process. SAIC participated in this project and submitted the report cited in this Office Action as the "SAIC" reference to Mr. Lazarick.

Prior to Applicants' filing date, Mr. Lazarick published preliminary results of the airport vulnerability assessments at the IEEE Proceedings of the 1998 International Carnahan

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Conference on Security Technology. This publication itself is cited as prior art as the "Lazarick" reference.

The publication of the Lazarick reference gave the public sufficient notice of the existence of airport vulnerability assessments by several organizations including SAIC. A researcher exercising reasonable diligence would have been alerted to the existence of the SAIC proposal. The Lazarick reference identified with specificity the information needed for a Freedom of Information Act request to the Federal Aviation Administration, seeking the proposals including the SAIC reference. The SAIC reference is then analogous to the grant proposal at issue in *du Pont*, and thus qualifies as a printed publication under Section 102.

5.2 Regarding Applicants' arguments that the amended and newly added claims are distinguishable from the Lazarick reference, as explained above in the claim rejections, these features are located in the Sandia reference. All rejections were made using the broadest reasonable interpretation of the claim language consistent with Applicants' Specification.

Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.
- 7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. 1.136(a).

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A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samuel Broda, whose telephone number is (571) 272-3709. The Examiner can normally be reached on Mondays through Fridays from 8:00 AM – 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kevin Teska, can be reached at (571) 272-3716. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist, whose telephone number is (571) 272-2100.

SAMUEL BRODA, ESQ. PRIMARY EXAMINER